DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: SIR-002994
Date Inspected: 03-Jan-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Changxing Dao, Shangha

Quality Control Contact:	Don Walton	**Quality Control Present:**	☑ Yes ☐ No
Material transfer:	☐ Yes ☐ No ☑ N/A	**Sampled Items:**	☐ Yes ☐ No ☑ N/A
Stock Transfer:	☐ Yes ☐ No ☑ N/A	**OK to Cut:**	☐ Yes ☐ No ☑ N/A
Rebar Test Witness:	☐ Yes ☐ No ☑ N/A	**Delayed/Cancelled:**	☐ Yes ☐ No ☑ N/A
Other:	Coatings Inspection		
Bridge No:	34-0006	**Component:**	Sub-Assemblies (OBG) and Office.
Bid Item:	77,78,79	**Lot No:**	

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Bike Path Panels (BK004A-022 and 058), NOI Number 5570: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Bike Path Panels (BK004A-022 and 058) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

CB15 and CB16 Cross Beam External Surfaces, NOI Number 5571: In accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives recorded the results of adhesion testing. CB15 and CB16 Cross Beam External Surfaces recorded are (CB15) x4 2 2.90 mPa 20% c 80% gf, 11.46 mPa 50% c, 6.89 mPa 90% c, and 5.08 mPa 80% c and (CB16) x4 7.51 mPa 90% c, 7.74 mPa 20% c, 7. 48 mPa 80% c, and 6.41 mPa 100% c. Contact support areas still need to be worked and discrepancies noted during adhesion testing on CB15 (failed test 2.90 mPa 20% c 80% gf) required ABF Quality Assurance personnel to instruct ZPMC to re-work and re-submit prior to final acceptance.

Bike Path Panels (4 Each) and Bike Path Brackets (7 Each), NOI Number 5572: In accordance with project

specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the final coat installation on Bike Path Panels (4 Each) and Bike Path Brackets (7 Each). ABF and ZPMC QA/QC recorded final surface dry film thickness readings (DFT) in accordance with SSPC-PA2. No discrepancies noted.

CB15 and CB16 Cross Beam External Surfaces, NOI Number 5573: In accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the final coat installation on CB15 and CB16 Cross Beam External Surfaces. ABF and ZPMC QA/QC recorded final surface dry film thickness readings (DFT) in accordance with SSPC-PA2. Contact support areas still need to be worked and discrepancies noted during adhesion testing on CB15 (failed test 2.90 mPa 20% c 80% gf) required ABF Quality Assurance personnel to instruct ZPMC to re-work and re-submit prior to final acceptance.

Bike Path Panels (BK4A-017, 025, 026, 028 and 055), NOI Number 5575: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels (BK4A-017, 025, 026, 028 and 055) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted and failed. ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point.

Counterweight Manhole Cover Plates WP-2 (10 Each), NOI Number 5576: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Counterweight Manhole Cover Plates WP-2 (10 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness), ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted with x 1 @ grade 4 and 1 @ grade 5. Also tested in accordance with ISO 11127-6 and ISO 11127-7, x1 soluble salts x1 with readings recorded @ 17. 8 (µs/cm). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers External Surfaces (37 Each), NOI Number 5581: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barriers External Surfaces (37 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Suspender Brackets One Side Only (8 Each), NOI Number 5582: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Suspender Brackets One Side Only (8 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers (6 Each), Shim Plates (155 Each), Ring for Bracket (SD1 2 Each and ND1 2 Each), Bolt Assembly Plates Bbr5-11 (4 Each), Splices SEG3013 (15 Each), Travel Rail Brackets (6 Each), Bike Path Panel BK4-029 and Crash Barrier Sealing Plates (8 Each), NOI Number 5583: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barriers (6 Each), Shim Plates (155 Each), Ring for Bracket (SD1 2 Each and ND1 2 Each), Bolt Assembly Plates Bbr5-11 (4 Each), Splices SEG3013 (15 Each), Travel Rail Brackets (6 Each), Bike Path Panel BK4-029 and Crash Barrier Sealing Plates (8 Each). Test results recorded x2 surface profile readings in the range of 64 to 80 µm and x1 soluble salts reading of 21.0 (µs/cm). No

major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers (6 each) and Press Block Plates (72 each), NOI Number 5584: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barriers (6 Each) and Press Block Plates (72 Each) in preparation for blasting operations. Minor discrepancies noted (additional edge grinding required) but was corrected by ZPMC personnel. ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Maintenance Travel Rail Brackets (28 Each), NOI Number 5585A: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Maintenance Travel Rail Brackets (28 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted and failed. ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point.

Bike Path Panels (BK4A-017, 026, 055), NOI Number 5586: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels (BK4A-017, 026, 055) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). No tests were conducted do to the presence of moisture on substrate. ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded, and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Cason,Kenneth	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer